

ABSTRACT

A cylinder liner for insert casting and a method for manufacturing the cylinder liner are provided. The cylinder liner and the method are applied to cylinder blocks and improve the adherence and the bonding strength with a cylinder block material in a favorable manner. The cylinder liner satisfies the following requirements: (i) the height of projections 1P is in a range between 0.5 mm and 1.0 mm, 5 inclusive; (ii) the number of the projections 1P is in a range between 5 and 60, inclusive, per cm^2 on the outer circumferential surface; (iii) the area ratio of regions each encircled by a contour line of a height of 0.4 mm is in a range between 10% and 50%, inclusive; (iv) the area ratio of 10 regions each encircled by a contour line of a height of 0.2 mm is in a range between 20% and 55%, inclusive; (v) the region each encircled by a contour line of the height of 0.4 are 15 independent from each other; and (vi) the area of the regions each encircled by a contour line of the height of 0.4 mm is in a range between 0.2 mm^2 and 3.0 mm^2 , inclusive. 20